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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,944	10/10/2006	Tomomichi Hashimoto	Q114482	3573
23373 7590 07/29/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER MOORE, MARGARET G				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
07/29/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com  
PPROCESSING@SUGHRUE.COM  
USPTO@SUGHRUE.COM

### Office Action Summary

**Application No.**

10/551,944

**Applicant(s)**

HASHIMOTO ET AL.

**Examiner**

Margaret G. Moore

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2010.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 to 22 is/are pending in the application.  
4a) Of the above claim(s) 16 to 22 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 to 15 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SI/225)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

1. Applicants' amendment overcomes the previous rejections. As such the following new ground of rejection is being made.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 8 and 10 to 15 are rejected under 35 U.S.C. 102(e) as anticipated Reddy et al.

Reddy et al. teach a silicone acrylate impact modifier. Column 7, lines 40 to 45, teach the presence of a polyethylenically unsaturated monomer meeting component (B). Of particular note, please see Example 1, column 14. This teaches monomeric components, and a silicone latex, in amounts meeting that claimed. The Examiner notes that the vinyl monomer having at least two polymerizable unsaturated bonds (b-1) can be present in as little as .2 wt% total (20% of the lower limit of 1 parts by weight). In addition, in general, note that the vinyl monomer (C) and the monomer (b-2) can be the same. On the other hand, the styrene and methyl methacrylate in column 14, lines 29, meet monomer (C).

For claim 10 and 11, note the MPTMS found in the preemulsion.

For claim 12 note that the grafting agent (F) is open to anything and as such does not lend distinction to this claim.

For claim 13 note that this is a product by process limitation that does not appear to have a distinction on the final product claimed.

For claims 14 and 15, please see column 10, line 44.

5. Claims 1, 8, 10 to 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang.

Wang teaches a flame retardant polyorganosiloxane based graft copolymer. Please see Example 1 in which a graft copolymer is prepared that uses amounts of a multifunctional monomer, a siloxane latex and another vinyl monomer in amounts that coincide with (A), (B) and (C) in claim 1. In addition, in general, note that the vinyl monomer (C) and the monomer (b-2) can be the same. In this manner Wang teaches the claimed component.

For claims 10 and 11, please see the methacryloxysilane on line 11 of column 15. For claims 14 and 15, please see column 8, lines 50 and on.

6. Claims 2 to 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reddy et al., or Wang as applied to claim 1 above, and further in view of JP 2002-201243.

The teachings in Reddy et al. and Wang were noted supra. Neither reference teaches a silicone latex in which the seed polymer is swelled by organosiloxane.

JP 2002-201243 teaches a polymeric particle preparation in which the seed polymer is swelled by organosiloxane. Note paragraphs 3 and on. This provides improved properties over aqueous emulsions in that it does not release moisture upon curing, reducing cracks in the final product.

One having ordinary skill in the art would have been motivated by the teachings in this JP patent to use a silicone latex swollen in an organosiloxane as the silicone latex used in Reddy et al. or Wang et al. in an effort to reduce the release of moisture

from the cured product formed therein. In this manner claims 2 to 7 are rendered obvious.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reddy et al. or Wang as applied to claim 1 above, and further in view of Higaki et al.

The teachings of Reddy et al. and Wang were noted supra. These references do not teach the polymerization initiator as claimed.

Higaki et al. teach a comparable composition as found in Reddy et al. and Wang. This reference teaches on column 6 the use of p-menthane hydroperoxide, a polymerization initiator that meets the requirement of claim 9. This initiator is used in the alternative with those taught by Reddy (column 9, lines 35 to 37) or Wang et al. "column 5, lines 45 and 46).

One having ordinary skill in the art would have been motivated by the teachings in Higaki et al. to use the photoinitiator taught therein in an equivalent manner with those taught by Reddy or Wang et al. Please note that it is prima facie obvious to substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. The express suggestion to substitute one equivalent for another need not be present to render the substitution obvious. Also note that both Reddy et al. and Wang et al. indicate that any known initiator can be used therein. Applicants are merely using a known initiator in a known manner to obtain the predictable results. In this manner the claim is rendered obvious.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday and Wednesday to Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Margaret G. Moore/  
Primary Examiner, Art Unit 1796

mgm  
7/20/10